

1600 Rus H

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/701,588C

CRF Processing Date:

Edited by:

Verified by:

12/16/2002

JM (STIC staff)

ENTERED

Changed a file from non-ASCII to ASCII

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically:

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other _____

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included:

Deleted extra, invalid, headings used by an applicant, specifically:

Deleted: non-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of file; page numbers throughout text; other invalid text, such as _____

Inserted mandatory headings, specifically:

Corrected an obvious error in the response, specifically:

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically:

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

Other:

Seqs 94, 97 - corrected misaligned amino acid nos.



1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/701,588C

DATE: 12/16/2002
TIME: 09:55:09

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\12162002\I701588C.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: UNITED BIOMEDICAL INC., ET AL.
 7 (ii) TITLE OF INVENTION: ARTIFICIAL T HELPER CELL
 8 EPITOPE AS IMMUNE STIMULATORS FOR SYNTHETIC
 9 EPTIDE IMMUNOGENS

11 (iii) NUMBER OF SEQUENCES: 151

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: Morgan & Finnegan, L.L.P.
 15 (B) STREET: 345 Park Avenue
 16 (C) CITY: New York
 17 (D) STATE: NY
 18 (E) COUNTRY: USA
 19 (F) ZIP: 10154-0054

21 (v) COMPUTER READABLE FORM:

22 (A) MEDIUM TYPE: Floppy disk
 23 (B) COMPUTER: IBM PC compatible
 24 (C) OPERATING SYSTEM: PC Windows
 25 (D) SOFTWARE: Word 97

27 (vi) CURRENT APPLICATION DATA:

C--> 28 (A) APPLICATION NUMBER: US/09/701,588C
 C--> 29 (B) FILING DATE: 29-Nov-2002

30 (C) CLASSIFICATION:

32 (vii) PRIOR APPLICATION DATA:

33 (A) APPLICATION NUMBER: 09/100,414
 34 (B) FILING DATE: 20-JUNE-1998

36 (viii) ATTORNEY/AGENT INFORMATION:

37 (A) NAME: Maria H. Lin
 38 (B) REGISTRATION NUMBER: 29,323
 39 (C) REFERENCE/DOCKET NUMBER: 1151-4158PC1

41 (ix) TELECOMMUNICATION INFORMATION:

42 (A) TELEPHONE: 212-758-4800
 43 (B) TELEFAX: 212-751-6849

46 (2) INFORMATION FOR SEQ ID NO: 1:

48 (i) SEQUENCE CHARACTERISTICS:

49 (A) LENGTH: 15 amino acids
 50 (B) TYPE: amino acid
 51 (D) TOPOLOGY: linear

53 (ii) MOLECULE TYPE: peptide

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

57 Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu

58 1 5 10

59 Glu Gly Val

RAW SEQUENCE LISTING
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Input Set : A:\PTO.AMC.txt
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60 15
62 (2) INFORMATION FOR SEQ ID NO: 2:
64 (i) SEQUENCE CHARACTERISTICS:
65 (A) LENGTH: 16 amino acids
66 (B) TYPE: amino acid
67 (D) TOPOLOGY: linear
69 (ii) MOLECULE TYPE: peptide
71 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
73 Asp Leu Ser Asp Leu Lys Gly Leu Leu Leu His Lys
74 1 5 10
75 Leu Asp Gly Leu
76 15
78 (2) INFORMATION FOR SEQ ID NO: 3:
79 (i) SEQUENCE CHARACTERISTICS:
80 (A) LENGTH: 16 amino acids
81 (B) TYPE: amino acid
C--> 82 (D) TOPOLOGY: LINEAR
84 (ii) MOLECULE TYPE: peptide
86 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
88 Glu Ile Ser Glu Ile Arg Gly Ile Ile Ile His Arg
89 1 5 10
90 Ile Glu Gly Ile
91 15
93 (2) INFORMATION FOR SEQ ID NO: 4:
94 (i) SEQUENCE CHARACTERISTICS:
95 (A) LENGTH: 16 amino acids
96 (B) TYPE: amino acid
C--> 97 (D) TOPOLOGY: LINEAR
99 (ii) MOLECULE TYPE: peptide
101 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
103 Asp Val Ser Asp Val Lys Gly Val Val Val His Lys
104 1 5 10
105 Val Asp Gly Val
106 15
108 (2) INFORMATION FOR SEQ ID NO: 5:
110 (i) SEQUENCE CHARACTERISTICS:
111 (A) LENGTH: 16 amino acids
112 (B) TYPE: amino acid
C--> 113 (D) TOPOLOGY: LINEAR
115 (ii) MOLECULE TYPE: peptide
117 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
119 Asp Phe Ser Asp Phe Lys Gly Phe Phe Phe His Lys
120 1 5 10
121 Phe Asp Gly Phe
122 15
124 (2) INFORMATION FOR SEQ ID NO: 6:
126 (i) SEQUENCE CHARACTERISTICS:
127 (A) LENGTH: 15 amino acids
128 (B) TYPE: amino acid

RAW SEQUENCE LISTING
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129 (D) TOPOLOGY: linear
131 (ii) MOLECULE TYPE: peptide
133 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
135 Ile Ser Glu Ile Lys Gly Val Ile Val His Lys Ile
136 1 5 10
137 Glu Gly Ile
138 15
140 (2) INFORMATION FOR SEQ ID NO: 7:
142 (i) SEQUENCE CHARACTERISTICS:
143 (A) LENGTH: 15 amino acids
144 (B) TYPE: amino acid
145 (D) TOPOLOGY: linear
147 (ii) MOLECULE TYPE: peptide
149 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
151 Met Thr Glu Ile Arg Thr Val Ile Val Thr Arg Met
152 1 5 10
153 Glu Thr Met
154 15
156 (2) INFORMATION FOR SEQ ID NO: 8:
158 (i) SEQUENCE CHARACTERISTICS:
159 (A) LENGTH: 15 amino acids
160 (B) TYPE: amino acid
161 (D) TOPOLOGY: linear
163 (ii) MOLECULE TYPE: peptide
165 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
167 Leu Ser Glu Ile Lys Gly Val Ile Val His Lys
168 1 5 10
169 Leu Glu Gly Val
170 15
172 (2) INFORMATION FOR SEQ ID NO: 9:
174 (i) SEQUENCE CHARACTERISTICS:
175 (A) LENGTH: 15 amino acids
176 (B) TYPE: amino acid
177 (D) TOPOLOGY: linear
179 (ii) MOLECULE TYPE: peptide
181 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
183 Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile
184 1 5 10
185 Glu Thr Ile
186 15
188 (2) INFORMATION FOR SEQ ID NO: 10:
190 (i) SEQUENCE CHARACTERISTICS:
191 (A) LENGTH: 15 amino acids
192 (B) TYPE: amino acid
193 (D) TOPOLOGY: linear
195 (ii) MOLECULE TYPE: peptide
197 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
199 Met Ser Glu Ile Lys Gly Val Ile Val His Lys Leu
200 1 5 10

RAW SEQUENCE LISTING
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Input Set : A:\PTO.AMC.txt
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201 Glu Gly Met
202 15
204 (2) INFORMATION FOR SEQ ID NO: 11:
206 (i) SEQUENCE CHARACTERISTICS:
207 (A) LENGTH: 15 amino acids
208 (B) TYPE: amino acid
209 (D) TOPOLOGY: linear
211 (ii) MOLECULE TYPE: peptide
213 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
215 Leu Thr Glu Met Arg Thr Val Ile Val Thr Arg Met
216 1 5 10
217 Glu Thr Val
218 15
220 (2) INFORMATION FOR SEQ ID NO: 12:
222 (i) SEQUENCE CHARACTERISTICS:
223 (A) LENGTH: 15 amino acids
224 (B) TYPE: amino acid
225 (D) TOPOLOGY: linear
227 (ii) MOLECULE TYPE: peptide
229 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
231 Ile Thr Glu Ile Arg Thr Val Ile Val Thr Arg Ile
232 1 5 10
233 Glu Thr Ile
234 15
236 (2) INFORMATION FOR SEQ ID NO: 13:
238 (i) SEQUENCE CHARACTERISTICS:
239 (A) LENGTH: 15 amino acids
240 (B) TYPE: amino acid
241 (D) TOPOLOGY: linear
243 (ii) MOLECULE TYPE: peptide
245 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
247 Met Ser Glu Met Lys Gly Val Ile Val His Lys Met
248 1 5 10
249 Glu Gly Met
250 15
252 (2) INFORMATION FOR SEQ ID NO: 14:
254 (i) SEQUENCE CHARACTERISTICS:
255 (A) LENGTH: 15 amino acids
256 (B) TYPE: amino acid
257 (D) TOPOLOGY: linear
259 (ii) MOLECULE TYPE: peptide
261 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
263 Leu Thr Glu Ile Arg Thr Val Ile Val Thr Arg Leu
264 1 5 10
265 Glu Thr Val
266 15
268 (2) INFORMATION FOR SEQ ID NO: 15:
270 (i) SEQUENCE CHARACTERISTICS:
271 (A) LENGTH: 19 amino acids

RAW SEQUENCE LISTING
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272 (B) TYPE: amino acid
273 (D) TOPOLOGY: linear
275 (ii) MOLECULE TYPE: peptide
277 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
279 Ile Ser Ile Ser Glu Ile Lys Gly Val Ile Val His
280 1 5 10
281 Lys Ile Glu Gly Ile Leu Phe
282 15
284 (2) INFORMATION FOR SEQ ID NO: 16:
286 (i) SEQUENCE CHARACTERISTICS:
287 (A) LENGTH: 19 amino acids
288 (B) TYPE: amino acid
289 (D) TOPOLOGY: linear
291 (ii) MOLECULE TYPE: peptide
293 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
295 Ile Ser Met Thr Glu Ile Arg Thr Val Ile Val Thr
296 1 5 10
297 Arg Met Glu Thr Met Leu Phe
298 15
300 (2) INFORMATION FOR SEQ ID NO: 17:
302 (i) SEQUENCE CHARACTERISTICS:
303 (A) LENGTH: 19 amino acids
304 (B) TYPE: amino acid
305 (D) TOPOLOGY: linear
307 (ii) MOLECULE TYPE: peptide
309 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
311 Ile Ser Leu Ser Glu Ile Lys Gly Val Ile Val His
312 1 5 10
313 Lys Leu Glu Gly Val Leu Phe
314 15
316 (2) INFORMATION FOR SEQ ID NO: 18:
318 (i) SEQUENCE CHARACTERISTICS:
319 (A) LENGTH: 19 amino acids
320 (B) TYPE: amino acid
321 (D) TOPOLOGY: linear
323 (ii) MOLECULE TYPE: peptide
325 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
327 Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr
328 1 5 10
329 Arg Ile Glu Thr Ile Leu Phe
330 15
332 (2) INFORMATION FOR SEQ ID NO: 19:
334 (i) SEQUENCE CHARACTERISTICS:
335 (A) LENGTH: 19 amino acids
336 (B) TYPE: amino acid
337 (D) TOPOLOGY: linear
339 (ii) MOLECULE TYPE: peptide
341 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
343 Ile Ser Leu Ser Glu Ile Lys Gly Val Ile Val His



1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/701,588C

DATE: 12/16/2002
TIME: 09:28:55

Input Set : A:\11514158.txt
Output Set: N:\CRF4\12162002\I701588C.raw

SEQUENCE LISTING

- 3 (1) GENERAL INFORMATION:
 - 5 (i) APPLICANT: UNITED BIOMEDICAL INC., ET AL.
 - 7 (ii) TITLE OF INVENTION: ARTIFICIAL T HELPER CELL
 - 8 EPITOPE AS IMMUNE STIMULATORS FOR SYNTHETIC
 - 9 PEPTIDE IMMUNOGENS
 - 11 (iii) NUMBER OF SEQUENCES: 151
 - 13 (iv) CORRESPONDENCE ADDRESS:
 - 14 (A) ADDRESSEE: Morgan & Finnegan, L.L.P.
 - 15 (B) STREET: 345 Park Avenue
 - 16 (C) CITY: New York
 - 17 (D) STATE: NY
 - 18 (E) COUNTRY: USA
 - 19 (F) ZIP: 10154-0054
 - 21 (v) COMPUTER READABLE FORM:
 - 22 (A) MEDIUM TYPE: Floppy disk
 - 23 (B) COMPUTER: IBM PC compatible
 - 24 (C) OPERATING SYSTEM: PC Windows
 - 25 (D) SOFTWARE: Word 97
 - 27 (vi) CURRENT APPLICATION DATA:
 - 28 (A) APPLICATION NUMBER: US/09/701,588C
 - 29 (B) FILING DATE: 29-Nov-2002
 - 30 (C) CLASSIFICATION:
 - 32 (vii) PRIOR APPLICATION DATA:
 - 33 (A) APPLICATION NUMBER: 09/100,414
 - 34 (B) FILING DATE: 20-JUNE-1998
 - 36 (viii) ATTORNEY/AGENT INFORMATION:
 - 37 (A) NAME: Maria H. Lin
 - 38 (B) REGISTRATION NUMBER: 29,323
 - 39 (C) REFERENCE/DOCKET NUMBER: 1151-4158PC1
 - 41 (ix) TELECOMMUNICATION INFORMATION:
 - 42 (A) TELEPHONE: 212-758-4800
 - 43 (B) TELEFAX: 212-751-6849

Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

- 1681 (2) INFORMATION FOR SEQ ID NO: 94:
 - 1683 (i) SEQUENCE CHARACTERISTICS:
 - 1684 (A) LENGTH: 46 amino acids
 - 1685 (B) TYPE: amino acid
 - 1686 (D) TOPOLOGY: linear
 - 1688 (ii) MOLECULE TYPE: peptide

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/701,588C

DATE: 12/16/2002
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Input Set : A:\11514158.txt
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1691 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 94:
1693 Ile Ser Ile Thr Glu Ile Arg Thr Val Ile Val Thr
1694 1 5 10
1695 Arg Ile Glu Thr Ile Leu Phe Gly Gly Cys Gly Glu
1696 15 20
1697 Thr Tyr Gln Ser Arg Val Thr His Pro His Leu Pro
E--> 1698 25 30 35-35
1699 Arg Ala Leu Met Arg Ser Thr Thr Lys Cys
E--> 1700 40 40 45-45
1743 (2) INFORMATION FOR SEQ ID NO: 97:
1745 (i) SEQUENCE CHARACTERISTICS:
1746 (A) LENGTH: 42 amino acids
1747 (B) TYPE: amino acid
1748 (D) TOPOLOGY: linear
1750 (ii) MOLECULE TYPE: peptide
1752 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 97:
1754 Leu Ser Glu Ile Lys Gly Val Ile Val His Lys Leu
1755 1 5 10
1756 Glu Gly Val Gly Gly Cys Gly Glu Thr Tyr Gln Ser
1757 15 20
1758 Arg Val Thr His Pro His Leu Pro Arg Ala Leu Met
E--> 1759 25 30 35-35
1760 Arg Ser Thr Thr Lys Cys
E--> 1761 40 40

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/701,588C

DATE: 12/16/2002

TIME: 09:28:56

Input Set : A:\11514158.txt
Output Set: N:\CRF4\12162002\I701588C.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:82 M:220 C: Keyword misspelled or invalid format, [(D) TOPOLOGY:]
L:97 M:220 C: Keyword misspelled or invalid format, [(D) TOPOLOGY:]
L:113 M:220 C: Keyword misspelled or invalid format, [(D) TOPOLOGY:]
L:1417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:0
L:1698 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:94
M:332 Repeated in SeqNo=94
L:1759 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:97
M:332 Repeated in SeqNo=97
L:2204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120 after pos.:12
L:2222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121 after pos.:12
L:2240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122 after pos.:12
L:2309 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:126 after pos.:12
L:2337 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:12
L:2364 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:128 after pos.:12
L:2391 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129 after pos.:12
L:2506 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136 after pos.:0
L:2530 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137 after pos.:0
L:2553 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138 after pos.:0
L:2576 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2580 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139 after pos.:0
L:2599 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140 after pos.:0
L:2622 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:141 after pos.:0
L:2645 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:142 after pos.:0
L:2668 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2672 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:143 after pos.:0
L:2691 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:144 after pos.:0
L:2714 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2718 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:145 after pos.:0
L:2737 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2741 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:146 after pos.:0
L:2760 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2764 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:147 after pos.:0
L:2830 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:150 after pos.:12
L:2857 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/701,588C

DATE: 12/16/2002

TIME: 09:28:56

Input Set : A:\11514158.txt

Output Set: N:\CRF4\12162002\I701588C.raw

L:2863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:151 after pos.:12